operator's certificate may not act as the chief radio officer.

- (b) Each cargo ship equipped with a radiotelegraph station in accordance with Part II of Title III of the Communications Act and which has a radiotelegraph auto alarm must carry a radio officer holding a first or second class radiotelegraph operator's certificate who has had at least six months service as a radio officer on board U.S. ships. If the radiotelegraph station does not have an auto alarm, a second radio officer who holds a first or second class radiotelegraph operator's certificate must be carried.
- (c) Each cargo ship equipped with a radiotelephone station in accordance with Part II of Title III of the Communications Act must carry a radio operator who meets the following requirements:
- (1) Where the station power does not exceed 1500 watts peak envelope power, the operator must hold a marine radio operator permit or higher class license.
- (2) Where the station power exceeds 1500 watts peak envelope power, the operator must hold a general radiotelephone radio operator license or higher class license.
- (d) Each ship transporting more than six passengers for hire equipped with a radiotelephone station in accordance with Part III of Title III of the Communications Act must carry a radio operator who meets the following requirements:
- (1) Where the station power does not exceed 250 watts carrier power or 1500 watts peak envelope power, the radio operator must hold a marine radio operator permit or higher class license.
- (2) Where the station power exceeds 250 watts carrier power or 1500 watts peak envelope power, the radio operator must hold a general radiotelephone operator license or higher class license.

[51 FR 31213, Sept. 2, 1986, as amended at 54 FR 40058, Sept. 29, 1989]

### §80.161 Operator requirements of the Great Lakes Radio Agreement.

Each ship subject to the Great Lakes Radio Agreement must have on board an officer or member of the crew who holds a marine radio operator permit or higher class license.

## §80.163 Operator requirements of the Bridge-to-Bridge Act.

Each ship subject to the Bridge-to-Bridge Act must have on board a radio operator who holds a restricted radiotelephone operator permit or higher class license.

# § 80.165 Operator requirements for voluntary stations. Minimum operator license

Ship Morse telegraph	T-2.
Ship direct-printing telegraph	MP.
Ship telephone, more than 250	G.
watts carrier power or 1,000 watts	
peak envelope power.	
Ship telephone, not more than 250	MP.
watts carrier power or 1,000 watts	
peak envelope power.	
Ship telephone, not more than 100	
watts carrier power or 400 watts	
peak envelope power:	
Above 30 MHz	None.1
Below 30 MHz	RP.
Ship earth station	RP.
<sup>1</sup> RP required for international voyage.	

GENERAL OPERATOR REQUIREMENTS

#### §80.167 Limitations on operators.

The operator of maritime radio equipment other than T-1, T-2, or G licensees, must not:

- (a) Make equipment adjustments which may affect transmitter operation;
- (b) Operate any transmitter which requires more than the use of simple external switches or manual frequency selection or transmitters whose frequency stability is not maintained by the transmitter itself.

### §80.169 Operators required to adjust transmitters or radar.

- (a) All adjustments of radio transmitters in any radiotelephone station or coincident with the installation, servicing, or maintenance of such equipment which may affect the proper operation of the station, must be performed by or under the immediate supervision and responsibility of a person holding a first or second class radiotelegraph operator's certificate or a general radiotelephone operator license.
- (b) Only persons holding a first or second class radiotelegraph operator

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certificate must perform such functions at radiotelegraph stations transmitting Morse code.

(c) Only persons holding an operator certificate containing a ship radar endorsement must perform such functions on radar equipment.

 $[51\ FR\ 31213,\ Sept.\ 2,\ 1986,\ as\ amended\ at\ 54\ FR\ 40058,\ Sept.\ 29,\ 1989]$ 

#### §80.175 Availability of operator licenses.

All operator licenses required by this subpart must be readily available for inspection.

## §80.177 When operator license is not required.

- (a) No radio operator authorization is required to operate:
- (1) A shore radar, a shore radiolocation, maritime support or shore radionavigation station;
- (2) A survival craft station or an emergency position indicating radio beacon;
  - (3) A ship radar station if:
- (i) The radar frequency is determined by a nontunable, pulse type magnetron or other fixed tuned device, and
- (ii) The radar is capable of being operated exclusively by external controls;
- (4) An on board station; or
- (5) A ship station operating in the VHF band on board a ship voluntarily equipped with radio and sailing on a domestic voyage.
- (b) No radio operator license is required to install a VHF transmitter in a ship station if the installation is made by, or under the supervision of, the licensee of the ship station and if modifications to the transmitter other than front panel controls are not made.
- (c) No operator license is required to operate coast stations of 250 watts or less carrier power or 1500 watts or less peak envelope power operating on frequencies above 30 MHz, or marine utility stations.
- (d) No radio operator license is required to install a radar station on a voluntarily equipped ship when a manual is included with the equipment that provides step-by-step instructions for the installation, calibration, and operation of the radar. The installation must be made by, or under the supervision of, the licensee of that ship sta-

tion and no modifications or adjustments other than to the front panel controls are to be made to the equipment.

[51 FR 31213, Sept. 2, 1986, as amended at 53 FR 41434, Oct. 28, 1987]

#### §80.179 Unattended operation.

The following unattended transmitter operations are authorized:

- (a) EPIRB operations when emergency conditions preclude attendance of the EPIRB transmitter by a person.
- (b) Automatic use of a transmitter during narrow band-direct printing (NB-DP) operations in accordance with CCIR Recommendation 476 or 625.
- (c) Automatic use of a transmitter during digital selective calling (DSC) operations in accordance with CCIR Recommendations 493 and 541.
- (d) Automatic use of transmitter when operating as part of the Automated Maritime Telecommunications System (AMTS) or an automated multi-station system for which provisions are contained in this part.
- (e) Automatic use of a VHF transmitter to send brief digital communications relating to the condition or safety of vessels while moored when all of the following conditions are met:
- (1) The equipment must be using DSC in accordance with CCIR Recommendations 493 and 541 as modified by this section.
- (2) Sensors must automatically activate the transmitter only under one or more of the following conditions:
  - (i) Fire, explosion;
  - (ii) Flooding;
  - (iii) Collision;
  - (iv) Grounding;
  - (v) Listing, in danger of capsizing;
  - (vi) Sinking;
  - (vii) Disabled and adrift; and
- (viii) Undesignated condition related to ship safety.
- (3) The "ROUTINE" DSC category must be used.
- (4) Communications must be selectively addressed to an individual station
- (5) Transmitter output power must not exceed one watt.
- (6) The call must employ a fixed format and must be in conformity with Recommendation 493 as follows: